

REMARKS

Claims 1 and 2 stand rejected under 35 U.S.C. 102(e) as being anticipated by Weng et al. (U.S.P. 6,719,694). Claims 1 and 2 further stand rejected under 35 U.S.C. 103(a) as being unpatentable over publication entitled "Improved Time-delay Estimates of Underwater Acoustic Signals Using Beam-forming and Pre-filtering Techniques" by Ferguson in view of Weng et al.

Although the Examiner relies on the passage of column 13, line 64 to column 14, line 5 and Figs. 3 and 4 of Weng et al., this passage only indicates that the flexible array, which should be deformed to a circular arc, cannot be correctly deformed; and as a result, it is deformed to a hyperbolic curve or parabolic curve. In other words, the described hyperbolic or parabolic curve is just an undesired result of deformation when a force is applied as mentioned in the passage. Thus, it can be understood that Weng et al. do not positively employ the hyperbolic curve with some particular aims of obtaining some advantageous effects. From the above-mentioned passage, it is clear that Weng et al. do not intentionally employ the hyperbolic curve to obtain some advantageous effects. Therefore, those skilled in the art cannot achieve the present invention, in which focusing is effected using a hyperbolic curve, even if the disclosure of Weng et al. is known.

Furthermore, in the Weng et al. reference, only beam focusing is discussed, and the prevention of drop in sound pressure in short distances to provide high sensitivity is not discussed at all.

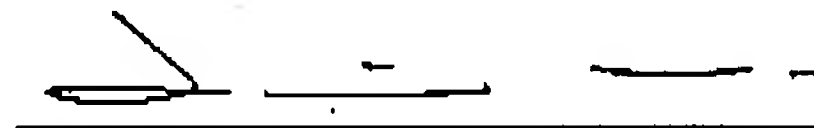
To expedite the prosecution, claims 1 and 2 have been amended by adding the phrase of "thereby resulting in less drop in sound pressure in short distances to provide high sensitivity" at the end thereof respectively. The above features are disclosed in Fig. 4 and in a passage from Page 6, Line 24 to Page 7, Line 11 of the originally filed specification. More specifically, in Fig. 4, it is shown that the drop of sound pressure

according to the present invention indicated by the solid line is less than that indicated by "+" signs in the conventional apparatus in an area whose distance in the depth direction is 2 to 4 cm.

Claims 1 and 2 have also been amended to by replacing "transversal" with "horizontal" so as to overcome 112 rejection.

It is believed that the present invention defined by amended set of claims are patentably distinguishable over the prior art, and all of the reasons for rejection have been overcome by the amendment of claims 1 and 2. Reconsideration and an early allowance are respectfully solicited.

Respectfully submitted,



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Date: May 11, 2009